

# MATERIAL SAFETY DATA SHEET

## URETHANE

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**TRADE NAME:** URETHANE

**PART No.:** 9U-6914

**UN/NA (PIN) No.:** N/A

**EMERGENCY TELEPHONE:** Rocky Mountain Poison Center Denver, Colorado  
(800) 458-5924 U.S. and Canada.  
(303) 893-1322 Outside U.S.

**SUPPLIER:** Chemtool Incorporated  
8200 Ridgefield Road  
P.O. Box 538  
Crystal Lake, IL 60039-0538

**TELEPHONE:** (815) 459-1250

**FAX:** (815) 459-1955

### 2. COMPOSITION, INFORMATION ON INGREDIENTS

INGREDIENT NAME:	CAS No.:	CONTENTS :	EPA RQ:	TPQ:
TERPHENYL, HYDROGENATED	61788-32-7	30-50 %	N/A	N/A
BENZENE, 1,1'-METHYLENEBIS[4-ISOCYANATO-	101-68-8	0-1 %	N/A	N/A
ACETIC ACID, BUTYL ESTER	123-86-4	0-1 %	5 000 lbs	N/A
BENZENE, DIMETHYL-	1330-20-7	0-1 %	1 000 lbs	N/A
LIMESTONE	1317-65-3	10-30 %	N/A	N/A
CARBON BLACK	1333-86-4	1-5 %	N/A	N/A
SOLVENT NAPHTHA (PETROLEUM), LIGHT	64742-89-8	5-10 %	N/A	N/A
ALIPHATIC				
ZINC OXIDE (ZnO)	1314-13-2	1-10 %	N/A	N/A

#### COMPOSITION COMMENTS:

Refer to section eight for exposure limits on ingredients.  
Chemical ingredients not regulated by OSHA or SARA are treated confidentially.

### 3. HAZARDS IDENTIFICATION

Irritating to eyes, respiratory system and skin. Risk of serious damage to eyes. Toxic, danger of very serious irreversible effects if swallowed. For further information, please refer to section 11.

#### CHRONIC EFFECTS:

#### SENSITIZATION:

No known information.

#### CARCINOGENICITY:

Product contains:  
IARC-3 and NIOSH-X listed carcinogen(s):  
Carbon Black, CAS # 1333-86-4, 1 - 5%

#### REPRODUCTION/TERATOGENICITY:

No known information.

**HEALTH WARNINGS:**

GENERAL HEALTH HAZARDS. Prolonged exposure to the preparation may cause serious health effects. **INHALATION.** The solvent vapors can be harmful and cause headache, nausea and intoxication. Prolonged inhalation of large concentrations can damage the respiratory system. **SKIN CONTACT.** Irritating. Repeated or prolonged contact can result in drying of the skin. **EYE CONTACT.** Irritating. Liquid, vapor and mists may cause discomfort in the eye with severe transient conjunctivitis. Serious corneal injury is not anticipated. **INGESTION.** Dangerous by ingestion. Main hazard, if ingested, is aspiration into the lungs and subsequent pneumonitis.

**ROUTE OF ENTRY:**

Inhalation. Skin and/or eye contact. Ingestion. Skin absorption.

**TARGET ORGANS:**

Central nervous system.

## 4. FIRST AID MEASURES

- INHALATION:** Remove victim immediately from source of exposure. Move the exposed person to fresh air at once. For breathing difficulties oxygen may be necessary. If breathing stops, provide artificial respiration. Get medical attention.
- INGESTION:** DO NOT INDUCE VOMITING! Only induce vomiting at the instructions of a physician. Get medical attention immediately!
- SKIN:** Remove contaminated clothing. Wash skin thoroughly with soap and water. Get medical attention if any discomfort continues.
- EYES:** Rinse the eye with water immediately. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

## 5. FIRE FIGHTING MEASURES

**FLASH POINT (°F):** 144                      **METHOD:** PM Closed cup.  
**FLAMMABILITY LIMIT - LOWER(%):** N/D  
**FLAMMABILITY LIMIT - UPPER(%):** N/D

**EXTINGUISHING MEDIA:**

Use: Foam. Carbon dioxide (CO<sub>2</sub>). Dry chemicals, sand, dolomite etc.

**SPECIAL FIRE FIGHTING PROCEDURES:**

Use water spray to keep fire exposed containers cool and disperse vapors. Water spray may be used to flush spills away from exposures.

**UNUSUAL FIRE & EXPLOSION HAZARDS:**

**VERY FLAMMABLE!** Pressure will increase in over heated, closed containers. Vapors concentrated in a confined or poorly ventilated area can be ignited upon contact with spark, flame or high intensity source of heat.

**HAZARDOUS COMBUSTION PRODUCTS:**

Acrid smoke/fumes. Oxides of: Carbon. Isocyanates

**PROTECTIVE MEASURES IN CASE OF FIRE:**

Self-contained breathing equipment and chemical resistant clothing recommended.

## 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:**

Minimize skin contact. Avoid breathing vapors; wear appropriate respirator. Remove sources of ignition.

**PRECAUTIONS TO PROTECT THE ENVIRONMENT:**

Keep product out of sewers and watercourses by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas. Assure conformity with applicable government regulations.

**SPILL CLEAN-UP PROCEDURES:**

Contain spill. Neutralize and absorb small amounts. Collect and return large amounts to shipping container. Rinse spill area with water.

**7. HANDLING AND STORAGE****HANDLING PRECAUTIONS:**

Avoid eye contact. Eye wash station should be available at the work place. Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Do not store or mix with strong oxidizers. Do not reuse container. Keep lid closed when not in use.

**STORAGE PRECAUTIONS:**

Store separate from strong acids and oxidizers. Keep away from heat, sparks and open flame. Do not store where temperatures may exceed 120 F.

**8. EXPOSURE CONTROLS, PERSONAL PROTECTION**

INGREDIENT NAME:	CAS No.:	OSHA PEL:		ACGIH TLV:		OTHER:		UNITS:
		TWA:	STEL:	TWA:	STEL:	TWA:	STEL:	
TERPHENYL, HYDROGENATED	61788-32-7	0.5	N.E.	0.5	N.E.	0.5	N.E.	ppm
BENZENE,	101-68-8	N.E.	0.02	0.005	N.E.	0.005	0.02	ppm
1,1'-METHYLENEBIS[4-ISOCYANATO-								
ACETIC ACID, BUTYL ESTER	123-86-4	150	200	150	200	150	200	ppm
BENZENE, DIMETHYL-	1330-20-7	100	150	100	150	100	150	ppm
LIMESTONE	1317-65-3	15	N.E.	10	N.E.	10	N.E.	mg/m3
								total dust
CARBON BLACK	1333-86-4	3.5	N.E.	3.5	N.E.	3.5	N.E.	mg/m3
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8	400	N.E.	300	N.E.	N/A	N/A	ppm
ZINC OXIDE (ZnO)	1314-13-2	10	N/A	10	N/A	N/A	N/A	mg/m3
								total dust

**PROTECTIVE EQUIPMENT:****ENGINEERING CONTROLS:**

Use engineering controls to reduce air contamination to permissible exposure level.

**VENTILATION:** No specific ventilation requirements noted, but forced ventilation may still be required if air contamination exceeds acceptable level.

**RESPIRATORS:** No specific recommendation made, but respiratory protection may still be required under exceptional circumstances when excessive air contamination exists.

**PROTECTIVE GLOVES:**

Chemical resistant gloves recommended to prevent prolonged or repeated contact.

**EYE PROTECTION:**

Wear splash-proof eye goggles to prevent any possibility of eye contact.

**PROTECTIVE CLOTHING:**

Wear appropriate clothing to prevent repeated or prolonged skin contact.

**HYGIENIC WORK PRACTICES:**

Wash at the end of each work shift and before eating, smoking and using the toilet.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>APPEARANCE/PHYSICAL STATE:</b>	Paste or slurry.	
<b>COLOR:</b>	Black.	
<b>ODOR:</b>	Petroleum.	
<b>SOLUBILITY DESCRIPTION:</b>	Insoluble in water.	
<b>DENSITY/SPECIFIC GRAVITY (g/ml):</b>	~1.20	TEMPERATURE (°F): 61
<b>VAPOR DENSITY (air=1):</b>	2.5	
<b>VAPOR PRESSURE:</b>	N/D	TEMPERATURE (°F):
<b>EVAPORATION RATE:</b>	7.1	REFERENCE: BuAc=1
<b>pH-VALUE, CONC. SOLUTION:</b>	N/A	

## 10. STABILITY AND REACTIVITY

**STABILITY:** Normally stable.

**CONDITIONS TO AVOID:**

Avoid contact with acids and oxidizing substances. Avoid heat, flames and other sources of ignition. Reaction with water, alcohol and amines is not hazardous if container can vent to the atmosphere to prevent pressure build-up.

**HAZARDOUS POLYMERIZATION:**

Will not occur.

**POLYMERIZATION DESCRIPTION:**

Not applicable

**HAZARDOUS DECOMPOSITION PRODUCTS:**

Oxides of: Carbon.

## 11. TOXICOLOGICAL INFORMATION

**TOXICOLOGICAL INFORMATION:**

No experimental toxicological data on the preparation as such is available.

## 12. ECOLOGICAL INFORMATION

**ECOLOGICAL INFORMATION:**

There is no ecological data on the product itself.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHODS:**

Spilled material, unused contents and empty containers must be disposed of in accordance with local, state and federal regulations.

## 14. TRANSPORT INFORMATION

**PROPER SHIPPING DESCRIPTION I:** Consumer commodity

**U.S. DOT:**

**UN/NA No.:** N/A

**U.S. DOT HAZARD LABEL:** No DOT label requirement noted  
**U.S. DOT CLASS:** ORM-D (Other Regulated Material D).

## 15. REGULATORY INFORMATION

### REGULATORY STATUS OF INGREDIENTS:

NAME:	CAS No:	TSCA:	CERCLA:	SARA 302:	SARA 313:	DSL(CAN):
TERPHENYL, HYDROGENATED	61788-32-7	Yes	N/A	N/A	N/A	Yes
BENZENE, 1,1'-METHYLENEBIS[4-ISOCYANATO-	101-68-8	Yes	N/A	N/A	Yes	Yes
ACETIC ACID, BUTYL ESTER	123-86-4	Yes	Yes	N/A	N/A	Yes
BENZENE, DIMETHYL-	1330-20-7	Yes	Yes	N/A	Yes	Yes
LIMESTONE	1317-65-3	Yes	N/A	N/A	N/A	Yes
CARBON BLACK	1333-86-4	Yes	N/A	N/A	N/A	Yes
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC	64742-89-8	Yes	N/A	N/A	N/A	Yes
ZINC OXIDE (ZnO)	1314-13-2	Yes	N/A	N/A	N/A	Yes

### US FEDERAL REGULATIONS: REGULATORY STATUS:

This Product or its components, if a mixture, is subject to following regulations (Not meant to be all inclusive - selected regulations represented): TSCA: The ingredients of this product are on the TSCA Inventory. SECTION 313: This product contains toxic chemical subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372. CERCLA 302.4. SARA 311 Categories: 1: Immediate (Acute) Health Effects. 2. Delayed (Chronic) Health Effects. 3. Fire Hazard. Canadian WHMIS Classification. P,P'-METHYLENEBIS (PHENYL ISOCYANATE Dimethylbenzene, CAS # 1330-20-7

### STATE REGULATIONS: STATE REGULATORY STATUS:

This product or its components, if a mixture, is subject to following regulations (Not meant to be all inclusive - selected regulations represented):. PROPOSITION 65: This product does not contain chemicals considered by the State of California's Safe Drinking Water and Toxic Enforcement Act of 1986 as causing cancer or reproductive toxicity, and for which warnings are now required.

### CANADIAN REGULATIONS: LABELS FOR SUPPLY:



### REGULATORY STATUS:

This Material Safety Data Sheet has been prepared in compliance with the Controlled Product Regulations.

## 16. OTHER INFORMATION

### NFPA HAZARD RATING:

**HEALTH:** Extremely hazardous, serious injury(3)  
**FLAMMABILITY:** Ignites easily (3).  
**REACTIVITY:** Unstable if heated (1).  
**SPECIAL HAZARD:** N/A

**NPCA HMIS HEALTH:** 3 Serious Hazard  
**PERS. PROTECT. INDEX:** B

**PREPARED BY:** Heather Holich

**DATE:**

January 31, 2002

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**DISCLAIMER:**

While the information and recommendations set forth herein are believed to be accurate as of the date thereof, Chemtool Incorporated makes no warranty with respect thereto and disclaims all liability from reliance therein.